Higher minimum wage leads to more robots being used to replace human jobs, my ev is quantified **Duke ‘14[[1]](#footnote-1)**

The survey contains extensive analysis of how increasing the minimum wage to $8.75, $10, or $15 would affect multiple business functions, including employment, benefits and a shift toward labor-saving technology (robots). The reported results apply directly to firms with workers that would be affected by a minimum wage hike (e.g., the 10 percent of workers currently earning $8.75 or less, the approximately 25 percent earning $10 or less, and the nearly half who earn $15 or less). Findings include: Few affected firms would lay off current employees if the minimum wage is increased to $8.75 but 46 percent would lay off employees at $15. Future employment growth would be curtailed at 35 percent of affected firms if the wage were set at $8.75, while two-thirds would curtail future hiring at $15. Nearly 20 percent of affected firms would reduce employee benefits or increase product prices if the minimum wage were increased to $8.75; approximately half would do both at $15. About 30 percent of affected companies think their ability to attract higher quality workers and reduce turnover would improve if the minimum wage were increased to $10, while about 40 percent feel the same at $15. In general, firms indicate they could reasonably accommodate a modest hike in the minimum wage to $8.75 but substantial negative consequences would kick in as the wage approaches $10. An ongoing shift away from labor and towards machinery will accelerate if the minimum wage is increased. “It is important to put these findings in perspective,” said [John Graham](http://www.fuqua.duke.edu/faculty_research/faculty_directory/graham/), a finance professor at [Duke’s Fuqua School of Business](http://www.fuqua.duke.edu/) and director of the survey. “For one thing, these results primarily apply to employees who currently earn less than $10 per hour, which is about one-fourth of the U.S. workforce, according to the Bureau of Labor Statistics. Among firms employing these low-wage workers, the expected effects of proposed minimum wage hikes are dramatic. According to CFOs at these firms, the low-wage employees that increases are designed to help will also bear significant employment risk, potentially losing their jobs as firms implement labor-saving technologies.” Nearly half of all companies surveyed indicate they have already or soon will implement labor-saving technology, which will allow them to maintain production with fewer employees. Among these companies, the average reduction in the needed number of employees is approximately 10 percent (median 5 percent). "Labor-saving technologies have dramatic and permanent effects," said Fuqua professor[Campbell R. Harvey](http://www.duke.edu/~charvey/), a founding director of the survey. "Once those jobs are lost, they do not come back. It is very important to note that low-skill jobs are most at risk of being eliminated by labor-saving technologies, with 62 percent of companies with employees earning less than $10 per hour investing in labor-saving techniques. This indicates that low-skill positions are the easiest to eliminate in favor of robots, implying great employment risk to low-skill workers if minimum wage is raised to $10 or $15 per hour.” “Raising the minimum wage gives the robots a competitive advantage,” says Harvey. “The manufacturing sector is already telling us that spending on labor saving technologies will allow them to shed 11 percent of their current employees over the next five years. Nearly three-fourths of that expenditure is aimed at the jobs with the lowest paid workers. Higher minimum wages will push firms to choose more robots and fewer people.” Seventy-six percent of U.S. CFOs say that other countries have tax policies that are more favorable to business than the U.S. tax code. As a result, 13 percent of those companies have considered reincorporating in another state or country (conducting a corporate inversion).   On a scale of 0-100, CFO optimism about the U.S. economy increased to 63 from 61 last quarter, continuing to rise above the long-run average of 59. Capital spending is expected to grow by more than 7 percent and full-time employment by 2 percent. Earnings should increase by more than 10 percent. “It looks like the economic recovery in the United States is gaining momentum pretty much across the board,” said David W. Owens, director of research at [CFO Publishing](http://ww2.cfo.com/about/cfo-publishing/). “However, having been burnt so badly during the recession, companies remain cautious. We still will need to wait and see how that optimism can translate into spending, especially in terms of taking on new employees.”  U.S. CFOs indicate governmental policies and increased regulation are their top two concerns in terms of risks to the financial performance of their firms. Other top concerns include the cost of benefits, economic uncertainty, difficulty attracting and retaining qualified employees, and data security.   Optimism has improved moderately in Europe. Business spending is expected to rise by 3.6 percent and earnings by 6 percent. Employment will be flat, however. Top concerns include economic uncertainty, governmental and regulatory policies, weak demand, difficulty attracting qualified employees and geopolitical crises.  If the minimum wage increased by 40 percent in Europe (which is analogous to a hike **from $7.25 to $10** in the US), 37 percent of firms with minimum wage employees would reduce current employment and 69 percent would reduce future hiring. Nearly 60 percent would shift towards labor-saving technologies. Of those who have already shifted or would soon shift towards labor saving-technologies, the need for workers is reduced 8 percent.  The most difficult positions to fill in Europe are skilled labor/staff, senior management, and especially engineers. European companies do not find it hard to fill jobs in manual labor, operating line, transportation and human resources.

Robots would be developed to be as productive as humans – causes AI development **Markoff and Miller 6/14**[[2]](#footnote-2)

From driverless cars to delivery drones, a new generation of robots is about to revolutionize the way people work, drive and shop. But there is one area where robots are already entrenched and spreading fast: the industrial sector, especially manufacturing and storage. Robots have long toiled alongside workers in factories and warehouses, where they load boxes with items ordered online, drill and weld car parts, or move food from one conveyor belt to the next. Now many experts worry about the dangers that robots pose to the humans who work alongside them. Robots have caused at least 33 workplace deaths and injuries in the United States in the last 30 years, according to data from the Occupational Safety and Health Administration. That may not sound like many, but the number may well understate the perils ahead. Unlike today’s robots, which generally work in cages, the next generation will have much more autonomy and freedom to move on their own. “In order for robots to work more productively, they must escape from their cages and be able to work alongside people,” said Kent Massey, the director of advanced programs at HDT Robotics. “To achieve this goal safely, robots must become more like people. They must have eyes and a sense of touch, as well as the intelligence to use those senses.” An employee accidentally activated a robot when he stepped on a conveyor belt where robots were moving boxes of meat. He became trapped. When his co-workers removed the robot, he fell to the floor. He was killed. Until now, robots have largely been used in manufacturing, particularly in the auto industry. They have mostly been “dumb robots,” designed for repetitive tasks that are dirty, dangerous or dull. Regulations have required that the robots operate separately from humans, in cages or surrounded by light curtains that stop the machines when people approach. As a result, most of the injuries and deaths have happened when humans who are maintaining the robots make an error or violate the safety barriers, such as by entering a cage. But the robots whose generation is being born today collaborate with humans and travel freely in open environments where people live and work. They are products of the declining cost of sensors and improved artificial intelligence algorithms in areas such as machine vision. Google’s newest driverless car, for instance, is completely automated, without a steering wheel or a brake pedal. Along with the new, free-roaming robots come new safety concerns. People worry about what happens if a robot spins out of control, or the first time a driverless car kills someone. “It’s the fear of robots,” said Bryant Walker Smith, a fellow at the Center for Internet and Society at Stanford Law School who studies driverless cars. “There’s something scarier about a machine malfunctioning and taking away control from somebody.”

AI development causes extinction. **Shulman and Armstrong ‘11**[[3]](#footnote-3)

. In contrast, numerous scholars have argued that advanced AI poses a nontrivial risk of catastrophic outcomes, including human extinction. (Bostrom, 2002; Chalmers, 2010; Friedman, 2008; Hall, 2007; Kurzweil, 2005; Moravec, 1999; Posner, 2004; Rees, 2004; Yudkowsky, 2008). Setting aside anthropomorphic presumptions of rebelliousness, a more rigorous argument (Omohundro, 2007) relies on the instrumental value of such behavior for entities with a wide variety of goals that are easier to achieve with more resources and with adequate defense against attack. Many decision algorithms could thus appear benevolent when in weak positions during safety testing, only to cause great harm when in more powerful positions, e.g. after extensive self-improvement. Given abundant time and centralized careful efforts to ensure safety, it seems very probable that these risks could be avoided: development paths that seemed to pose a high risk of catastrophe could be relinquished in favor of safer ones. However, the context of an arms race might not permit such caution. A risk of accidental AI disaster would threaten all of humanity, while the benefits of being first to develop AI would be concentrated, creating a collective action problem insofar as tradeoffs between speed and safety existed. A first-pass analysis suggests a number of such tradeoffs. Providing more computing power would allow AIs to either operate at superhumanly fast timescales or to proliferate very numerous copies. Doing so would greatly accelerate progress, but also render it infeasible for humans to engage in detailed supervision of AI activities. To make decisions on such timescales AI systems would require decision algorithms with very general applicability, making it harder to predict and constrain their behavior. Even obviously risky systems might be embraced for competitive advantage, and the powers with the most optimistic estimates or cavalier attitudes regarding risk would be more likely to take the lead. IV. Barriers to AI arms control Could an AI arms race be regulated using international agreements similar to those governing nuclear technology? In some ways, there are much stronger reasons for agreement: the stability of nuclear deterrence, and the protection afforded by existing nuclear powers to their allies, mean that the increased threat of a new nuclear power is not overwhelming. No nuclear weapons have been detonated in anger since 1945. In contrast, simply developing AI capable of producing an intelligence explosion puts all states at risk from the effects of accidental catastrophe, or the military dominance engendered by a localized intelligence explosion. However, AI is a dual-use technology, with incremental advances in the field offering enormous economic and humanitarian gains that far outweigh near-term drawbacks. Restricting these benefits to reduce the risks of a distant, novel, and unpredictable advance would be very politically challenging. Superhumanly intelligent AI promises even greater rewards: advances in technology that could vastly improve human health, wealth, and welfare while addressing other risks such as climate change. Efforts to outright ban or relinquish AI technology would seem to require strong evidence of very high near-term risks. However, agreements might prove highly beneficial if they could avert an arms race and allow for more controlled AI development with more rigorous safety measures, and sharing of the benefits among all powers. Such an agreement would face increased problems of verification and enforcement. Where nuclear weapons require rare radioactive materials, large specialized equipment, and other easily identifiable inputs, AI research can proceed with only skilled researchers and computing hardware. Verification of an agreement would require incredibly intrusive monitoring of scientific personnel and computers throughout the territory of participating states. Further, while violations of nuclear arms control agreements can be punished after the fact, a covert intelligence explosion could allow a treaty violator to withstand later sanctions. These additional challenges might be addressed in light of the increased benefits of agreement, but might also become tractable thanks to early AI systems. If those systems do not themselves cause catastrophe but do provide a decisive advantage to some powers, they might be used to enforce safety regulations thereafter, providing a chance to “go slow” on subsequent steps. V. Game-theoretic model of an AI arms race In the full paper, we present a simple game-theoretic model of a risky AI arms race. In this model, the risk of accidental catastrophe depends on the number of competitors, the magnitude of random noise in development times, the exchange rate between risk and development speed, and the strength of preferences for developing safe AI first. VI. Ethical implications and responses The above analysis highlights two important possible consequences of advanced AI: a disruptive change in international power relations and a risk of inadvertent disaster. From an ethical point of view, the accidental risk deserves special attention since it threatens human extinction, not only killing current people but also denying future generations existence. (Matheny, 2007; Bostrom, 2003). While AI systems would outlive humanity, AI systems might lack key features contributing to moral value, such as individual identities, play, love, and happiness (Bostrom, 2005; Yudkowsky, 2008). Extinction risk is a distinctive feature of AI risks: even a catastrophic nuclear war or engineered pandemic that killed billions would still likely allow survivors to eventually rebuild human civilization, while AIs killing billions would likely not leave survivors. (Sandberg & Bostrom, 2008). However, a national monopoly on an AI intelligence explosion could also have permanent consequences if it was used to stably establish its position. Permanent totalitarianism is one possibility (Caplan, 2008). We conclude by discussing some possible avenues for reducing these long-term risks.

Terminator link card:

Raising the minimum wage leads to low-wage workers being replaced by robots – The Terminator is proof this will go badly

**Carter 14** writes[[4]](#footnote-4)

**I oppose** implementing **Skynet and increasing minimum wage** laws **for the same reason: to forestall the robots. It’s** probably **inevitable that a T-1000 will return** from the future **to terminate John Connor. But** there is still something **we can** do to **prevent a TIOS from eliminating the cashier at** your local **McDonalds**. In Europe, McDonalds has ordered 7,000 TIOSs (Touch Interface Ordering Systems) to take food orders and payment. In America, **Panera** Bread **will replace** all of their **cashiers with wage-free robots** in all of their 1,800 nationwide locations **by 2016**. There is even a burger-making robot that can churn out 360 gourmet hamburgers per hour. I, for one, welcome our new fast-food robot overlords. I’m just not ready for them yet. As I noted earlier this week, we are all much better off because of 19th century workers who lost their farm jobs. In the long-turn, we’ll also be better off because a HAL 9000 is flipping our burgers and freeing up the Hals and Hallies of the world for more productive work. But in the short-run, the use of **robot replacements** for low wage employees **will hurt the poorest**, most **low-skilled workers. The main advantage such workers have now is that they are cost efficient**. Fast-food businesses are currently willing hire low-skilled workers and serve as remedial-training vocational schools because it’s in their economic self-interest to do so. But raising the minimum wage takes away that incentive and will motivate businesses to replace those workers with automated machines. It’s certainly the rational choice. If you were the owner of a fast-food restaurant, would you rather be staffed by efficient, reliable robots or low-skilled workers (e.g., teenagers, ESL-adults) who tend to have higher than normal human problems? **If it suddenly becomes cheaper to buy robots** than pay a premium for human labor, **what do you think businesses will choose?** We already have the answer—you can find it at your local gas station. If you are younger than 40 you aren’t likely to remember full-service filling stations (unless you live in Oregon or New Jersey where self-service if forbidden by law). Yet they were once the norm. In 1950, there were over 81,000 gas stations and only about 200 self-service stations (almost all in California). It wasn’t until the two gas shortages in the 1970s (1973 and 1979) caused higher fuel prices which led consumers to look for pricing relief. Almost overnight, full-service stations became all but extinct—taking an entire sector of low-skilled jobs with it. Proposals to rapidly increase the minimum wage would have the same effect. A small group of employees would see their pay increase while many more would find their jobs disappearing completely, never to come back. Keeping the minimum wage at it’s current rate (or, better yet, eliminating wage floors completely) would allow for a smoother transition and give low-skilled workers time to adjust. Sometimes what initially appears to be a noble and humane idea has unforeseen and dramatic consequences. **Proponents of minimum wage increases have good intentions. But so did the engineers at Cyberdyne Systems. And we know how that turned out.**

1. ## Duke University School of Business. “CFO Survey: Minimum Wage Hikes Would Lead to Fewer Jobs, More Machines “ September 09, 2014.

   [↑](#footnote-ref-1)
2. John Markoff and Claire Cain Miller (journalists who often write for the New York Times). “As Robotics Advances, Worries of Killer Robots Rise.” New York Times. June 16th, 2014. http://www.nytimes.com/2014/06/17/upshot/danger-robots-working.html?\_r=0 [↑](#footnote-ref-2)
3. Carl Shulman (Singularity Institute of Artificial Intelligence) and Stuart Armstrong (InhibOx, an organization dedicated to developing and delivering the best services and technologies in computer-aided drug discovery ). “Singularity Hypotheses: A Scientific and Philosophical Assessment.” April 13th, 2011. http://singularityhypothesis.blogspot.com/2011/04/arms-races-and-intelligence-explosions.html [↑](#footnote-ref-3)
4. Joe Carter (Senior Editor at the Acton Institute. Joe also serves as an editor at the The Gospel Coalition, online editor for First Things, and as an adjunct professor of journalism at Patrick Henry College). “Why We Should Oppose Both Skynet and Minimum Wage Increases.” Action Institute Power Blog. May 16th, 2014. http://blog.acton.org/archives/68913-oppose-skynet-minimum-wage-increases.html [↑](#footnote-ref-4)